

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listing of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently amended) An multi-cycle, reciprocating piston-type, internal combustion engine comprising [[;]] at least one master cylinder which includes a reciprocating piston being connected to a crankshaft, and at least one slave cylinder which includes a reciprocating piston being connected to said crankshaft; and an overhead valve means for [[,]] admission of gases of air and fuel mixture to said master cylinder and admission of air only to said slave cylinder and discharge of exhaust gases from said slave cylinder; wherein the engine comprises at least two cylinders disposed to form a pair, one being said master cylinder adjacent the other, said other being said slave cylinder; and, with a coordinate means [[,]] for coordinating exchange of gases between said master cylinder and adjacent said slave cylinder, said means for coordinating exchange of gases being a coordinate valve means at a side of said master cylinder, said coordinate valve means including a passage port of sufficient size to permit flow of gases therethrough between said slave cylinder and said master cylinder, said passage port channelling gases through said valve from said master cylinder to said slave cylinder, said coordinate valve means being open at approximately 420

degrees of cycle revolution for initiating a flow of compressed air from said slave cylinder to said master cylinder, said flow of compressed air from said slave cylinder being substantially completed by 450 degrees of cycle revolution.

Claims 2 – 3 (Cancelled).

Claim 4 (Currently amended) An internal combustion engine of claim [[3]] 1, where said compressed air from said slave cylinder will combine with heat energy from said master cylinder in said slave cylinder to produce a second power cycle through said coordinate valve without addition of fuel.

Claim 5 (Original) An internal combustion engine according to claim 1, where said master cylinder and said slave cylinder are operating 60 degrees to 120 degrees apart, with said slave cylinder trailing said master cylinder.

Claim 6 (Original) An internal combustion engine according to claim 1, wherein said two cylinders are disposed along a line, adjacent the crankshaft to which they are connected.

Claim 7 (Original) An internal combustion engine according to claim 1, wherein said two cylinders are disposed in a V cylinder configuration, adjacent the crankshaft to which they are connected.

Claim 8 (Original) An internal combustion engine according to claim 1, comprising a multiple of said master cylinder and said slave cylinder pairs.

Claim 9 (Currently amended) An internal combustion engine according to claim [[2]] 1, wherein a second coordinating valve means is located overhead of said slave cylinder working with said coordinating valve means above said master cylinder.

Claim 10 (Original) An internal combustion engine as claimed in claim 1, wherein said engine is an engine of a type of charged intake.

Claim 11 (Currently amended) An eight-cycle, reciprocating piston-type, internal combustion engine having [[;]] a basic unit comprising at least one four-cycle master cylinder and a piston; [[, and]] at least one four-cycle slave cylinder and a piston; ~~, provided with~~ means for introducing and firing a fuel-air mixture for said master cylinder; [[,]] means for introducing air for said slave cylinder; [[,]] ~~including~~ means for transferring expansion gases between said master cylinder and

said slave cylinder; and means for coordinating expansion gases between said master cylinder and said slave cylinder [[;]] and to produce a second power stroke from said slave cylinder, said coordinating means for coordinating exchange of expansion gases between said master cylinder and said slave cylinder is a coordinating valve means at said master cylinder side, said coordinating valve means including a passage port extending between said master cylinder and said slave cylinder for channelling expansion gases from said slave cylinder through said coordinating valve to said master cylinder, and said master cylinder expansion gases to said slave cylinder, said coordinate valve means being open at approximately 420 degrees of cycle revolution, where compressed air from said slave cylinder flows into said master cylinder, said flow of compressed air from said slave cylinder being substantially completed by approximately 450 degrees of cycle revolution; said basic unit and including exhaust passage means from said slave cylinder to outside; and wherein said master cylinder and said slave cylinder are operating between 60 and 120 degrees apart with said slave cylinder trailing said master cylinder.

Claims 12 – 13 (Cancelled).

Claim 14 (Currently amended) An internal combustion engine of claim [[13]] 11, where said compressed air from said slave cylinder will combine with

heat energy from said master cylinder in said slave cylinder to produce said second power cycle without addition of fuel.

Claim 15 (Original) An internal combustion engine according to claim 11, where said master cylinder and said slave cylinder are operating 90 degrees apart, with said slave cylinder trailing said master cylinder.

Claim 16 (Original) An internal combustion engine according to claim 11, wherein said master cylinder and said slave cylinder are disposed along a line, adjacent the crankshaft to which they are connected.

Claim 17 (Original) An internal combustion engine according to claim 11, wherein said master cylinder and said slave cylinder are disposed in a V cylinder configuration, adjacent the crankshaft to which they are connected.

Claim 18 (Original) An internal combustion engine according to claim 11, comprised of multiples pairs of said master cylinder and said slave cylinder.

Claim 19 (Currently amended) An internal combustion engine according to claim [[12]] 11, wherein a second coordinating valve means is located overhead of

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said slave cylinder, working with said coordinating valve means above said master cylinder.

Claim 20 (Original) An internal combustion engine according to claim 11, wherein said engine is an engine of a type charged intake.